

## REMARKS

By an Office Action dated November 5, 2003 in the file of this application, the Patent and Trademark Office rejected the claims of the application on a variety of grounds. Based on this submission, reconsideration of the merits of this patent application is respectfully requested.

The first ground of rejection in the Office Action was under 35 U.S.C. §101 as non-statutory subject matter. The Examiner asserted that the claim language read on human embryos. Changes to the claims made above makes it clear that the claim language applies only to an *in vitro* culture of embryonic stem cells. It is believed that this change will overcome this ground of rejection. Support for the language inserted into claim 1 can be found in the specification on page 26, lines 23-27.

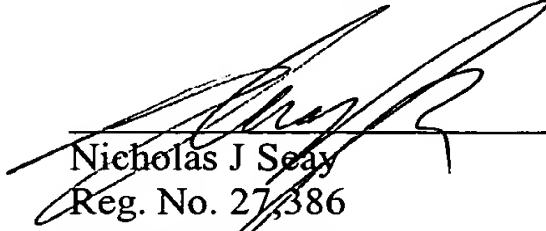
The second issue raised in the Office Action was double patenting, both statutory double patenting and obviousness-type double patenting. First, to remove any issue of obviousness-type double patenting, a terminal disclaimer on behalf of this application is submitted herewith. Secondly, on the issue of statutory double patenting, the claims now explicitly recite that the cells will proliferate in culture without the need for exogenous leukemia inhibitory factor. This is recited in the specification on page 35, lines 27-30. This limitation differentiates the claims of this patent application from those of the previously issued parent '780 patent.

The next rejection in the Office Action was a rejection under 35 U.S.C. §112, second paragraph. This rejection is not completely understood. First, no mention is made in the Office Action of any defect or indefiniteness in the language of claim 12. The Examiner states, correctly, that the characteristics recited in claims 13 and 20 are also true for human embryonic stem cells created by the methods described in the application. While this is believed true, it is not understood why this observation supports a rejection under §112. The claims must be definite and must distinguish the prior art, and the present claims meet both of those requirements. It is not required that the applicant list every distinguishing characteristic of his invention in every claim. This rejection is non-statutory, and it is requested that the rejection be reconsidered and withdrawn.

Lastly, the Office Action included a rejection of the claims based on prior art mentioning human embryos cultured to a blastocyst stage. It is believed that the changes to the claim language above overcome this rejection. Hardy does not show a replicating *in vitro* cell culture, as is now recited in the claims of this application. This rejection is no longer appropriate.

A two month extension of time is submitted herewith so that this Response will be considered as timely filed. Please charge this fee and any other fee deemed to be due to Deposit Account No. 17-0055.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Nicholas J. Seay", is written over a horizontal line.

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